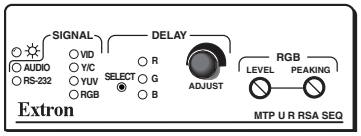
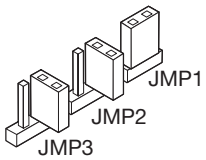
Extron Electronics
INTERFACING, SWITCHING AND CONTROL

IMPORTANT: Go to www.extron.com for the complete user guide, installation instructions, and specifications before connecting the product to the power source.

MTP U R Series • Setup Guide



This card provides quick start instructions for an experienced installer to set up and operate any of the MTP U R Series products.



Default settings (viewed from rear)

Pre-installation — Jumper Settings

The MTP U R has three jumpers located on the main board. JMP1 is RS-232 directional communication, and JMP2 and JMP3 are for vertical and horizontal sync (respectively). By default JMP1 is bidirectional; JMP2 and JMP3 are negative sync.

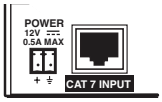
Installation

Step 1 — Mounting

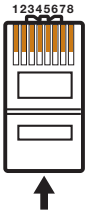
Turn off or disconnect all equipment power sources and mount the MTP U R as required.

Step 2 — Connect Input

Connect the RJ-45 cable from an MTP transmitter to the Input port on the MTP U R. Terminate the cable as shown on the right, using the same standard (A or B) at both ends.



RJ-45 Connector Pins:



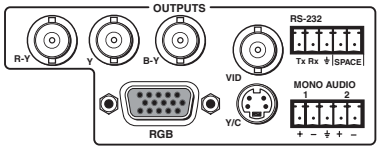
Insert Twisted Pair Wires

Pin	T568A Wire color	T568B Wire color
1	White-green	White-orange
2	Green	Orange
3	White-orange	White-green
4	Blue	Blue
5	White-blue	White-blue
6	Orange	Green
7	White-brown	White-brown
8	Brown	Brown

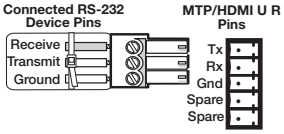
NOTE: If the input is labeled “CAT 7 Input”, only a CAT 7 cable should be used (that is, MTP C7 U R RSA SEQ model).

Step 3 — Connect Outputs

Attach the applicable output cables (video, audio, and RS-232), depending on the MTP U R model used.

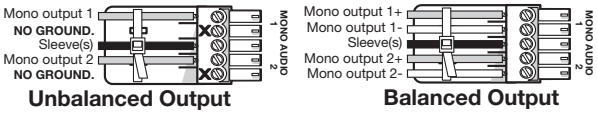


- **Composite video output connector** — Connect to the single female BNC connector (VID) .
- **S-video output connector** — Connect to the 4-pin mini DIN connector (Y/C).
- **Component video (MTP U R RSA SEQ model only)** — Connect to the three female BNC connectors (Y, R-Y, and B-Y).
- **High resolution video output connector** — Connect to the 15-pin HD connector (RGB).
- **RS-232 connector** — Connect a serial communications port to the upper 3.5 mm, 5-pole captive screw connector for bidirectional RS-232 communication (as shown).
- **Audio connector (MTP U R RSA SEQ and MTP U R A models only)** — Connect a suitable audio device to the lower 5-pole captive screw connector for mono audio output (as shown).



audio device

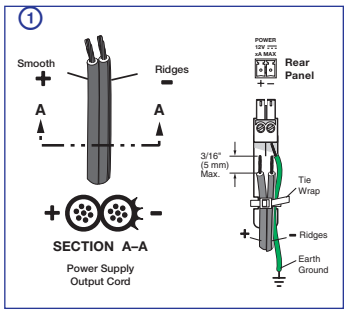
Do not tin the wires!



Unbalanced Output — Balanced Output

Step 4 — Power

Plug the included external 12 VDC power supply into the 2-pole captive screw connector. Wire the connector (see image ① on the right).

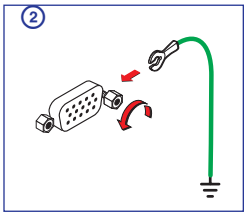


Grounding guidelines

Extron MTP U R products can be adversely affected by electrostatic discharge (ESD) if they are not grounded correctly.

To prevent malfunctions or product damage, an experienced installer can correctly ground an Extron MTP U R product in either of two ways:

- **Ground the power input port** — Insert one end of the grounding wire to the negative or ground pin on the power input connector (see image ① on the right). Tie the other end of the wire to an earth ground.
- **Ground the chassis** — Use a connector hex nut as shown in image ② the right. Tie the other end of the wire to an earth ground.



If you have any questions about how to ground a product in a specific application, contact an Extron technical support specialist.

Step 5 — Input Signal Detection

Check the displayed output is correct. The MTP U R detects the input signal format, indicated by the front panel LEDs (VID, Y/C, YUV, RGB), and differentiates between RS-232 and audio signals. The output is then made on the appropriate connector and all other outputs are muted.

Step 6 — Peaking and Level

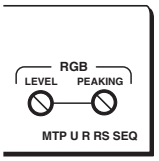
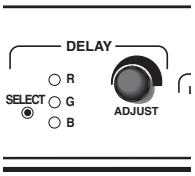


Image sharpness is adjusted with the **Peaking Control**. Increased peaking compensates for mid- and high-frequency detail loss. Minimum setting (full counterclockwise) is zero peaking.

Image brightness is adjusted using the **Level Control.** View the image and adjust the control for the best image quality.

Step 7 — Skew Compensation



Pair skew can be measured with test equipment or by viewing a crosshatch test pattern. The SEQ receivers have built-in skew compensation capabilities. Adjust the equalization as follows:

A. **Zero the skew delay** for red, green, and blue by using a Tweeker or small screwdriver to press and **hold** the Select button for 3 seconds. When the Red, Green, and Blue LED's all go out, release the Select button.

B. Use UTP cable test equipment or examine the displayed image to **determine which video signal** (red, green, or blue) **is shifted furthest to the right**.

C. **Adjust the furthest left video signal** towards the right by using a Tweeker or screwdriver to press and release the Select button until the LED for the left-shifted color lights.

D. ***Slowly*** rotate the Adjust control clockwise until the shifted color is properly aligned.

E. Repeat steps C and D to align the third color if needed.

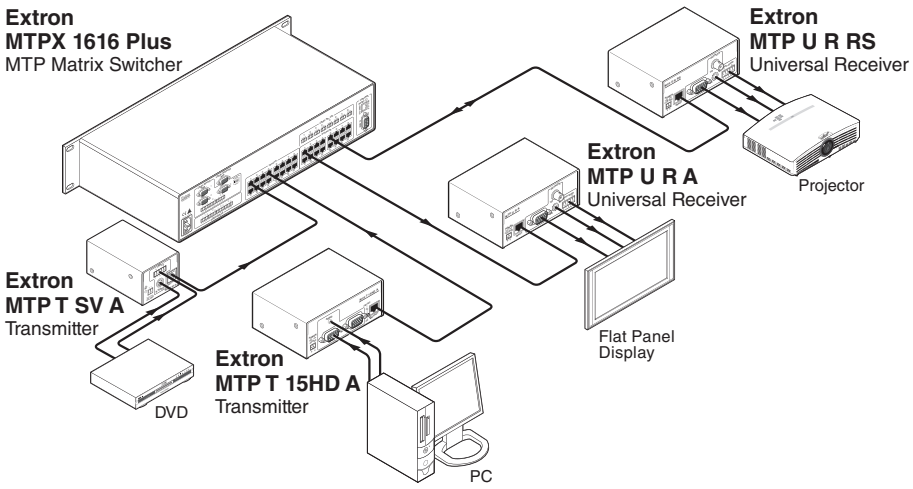


Figure 1. Example of a Typical MTP U R Series Application

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